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THE Feed SITUATION

BUREAU OF AGRICULTURAL ECONOMICS
UNITED STATES DEPARTMENT OF AGRICULTURE

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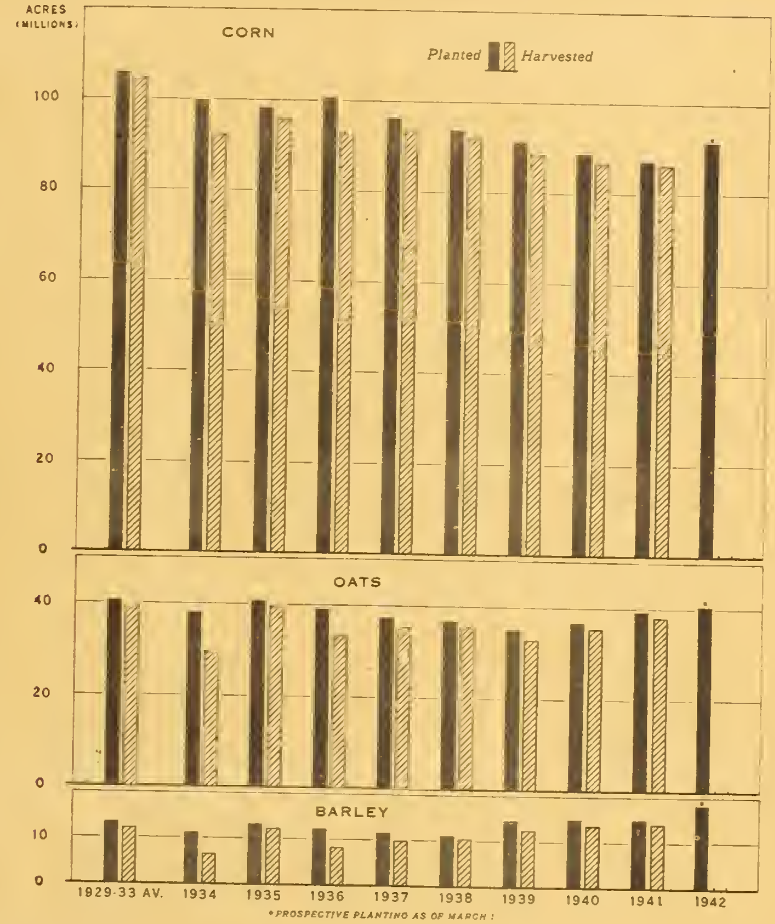

U. S. DEPARTMENT OF AGRICULTURE NEG. 38120 BUREAU OF AGRICULTURAL ECONOMICS

MARCH 1 INTENTIONS OF FARMERS INDICATE THAT THE 1942 PLANTED ACREAGE OF FOUR FEED GRAINS MAY BE 6 PERCENT GREATER THAN IN 1941. A SIMILAR INCREASE IN THE NUMBER OF GRAIN-CONSUMING ANIMAL UNITS IS IN PROSPECT. BUT UNLESS YIELDS PER ACRE THIS YEAR ARE ABOUT EQUAL TO THE EXCEPTIONALLY HIGH YIELDS OBTAINED IN 1941, DISAPPEARANCE OF FEED GRAINS NEXT SEASON PROBABLY WILL EXCEED 1942 PRODUCTION. THIS WOULD RESULT IN SOME REDUCTION IN THE LARGE CORN CARRY-OVER.

Table 1.- Market prices of feeds and livestock-feed price ratios, March 1940, 1941, and January-March 1942

Item	Unit	Mar. 1940	Mar. 1941	1942 Jan.	1942 Feb.	1942 Mar. 1/
		Dol.	Dol.	Dol.	Dol.	Dol.
Grains						
Corn No. 3 Yellow, Chicago	Bu.	57.9	65.6	81.8	81.9	81.3
No. 3 Yellow, Kansas City	"	59.7	59.6	79.1	77.4	79.3
Oats No. 3 White, Chicago	"	43.0	38.6	57.8	55.9	53.6
No. 3 White, Minneapolis	"	39.3	34.6	54.3	53.4	50.7
Barley No. 3, Minneapolis	"	53.0	50.6	76.2	73.1	69.7
Wheat No. 2 Hd. Winter, Kansas City	"	102.1	85.1	125.6	123.1	122.4
Rye No. 2, Minneapolis	"	66.5	52.4	80.3	78.1	76.7
Soybeans No. 2 Yellow, Chicago	"	113.6	103.6	183.3	195.2	193.0
Byproduct Feeds						
Standard bran, Minneapolis	Ton	22.60	21.10	33.30	32.55	36.00
Chicago	"	24.00	22.10	35.25	34.15	38.25
Buffalo	"	25.50	24.00	37.40	35.75	41.00
Standard middlings, Minneapolis	"	21.75	20.90	33.55	33.00	35.25
Chicago	"	23.50	22.30	35.55	34.65	37.25
Buffalo	"	24.70	23.60	37.00	35.40	38.50
Cottonseed meal, 41% protein, Chicago	"	36.20	30.75	46.10	43.60	42.75
41% protein, Memphis	"	30.25	24.45	39.90	37.90	37.50
Soybean meal, 41% protein, Chicago	"	30.45	26.85	46.45	46.45	46.20
Linseed meal, 37% protein, Minneapolis	"	30.40	27.40	39.50	42.50	42.50
37% protein, Buffalo	"	32.75	26.60	38.00	37.60	36.50
Peanut meal, 45% protein, S. E. milling points	"	32.70	20.90	44.10	45.70	45.00
Copra meal, Los Angeles	"	19.60	25.25	48.30	49.50	50.00
White hominy feed, Chicago	"	22.25	24.50	33.75	33.20	31.00
Gluten feed, 23% protein, Chicago	"	22.40	20.75	30.20	31.00	32.70
Tankage, digester, 60%, Chicago	"	45.60	47.80	76.90	80.00	80.00
Meat scraps, Chicago	"	47.50	42.80	73.75	75.00	75.00
Fish meal, San Francisco	"	51.45	60.60	75.95	77.40	77.50
Brewers' dried grains, Milwaukee	"	24.25	20.50	35.50	35.60	32.00
Distillers' dried grains, Cincinnati	"	28.60	25.25	39.90	39.40	34.25
Alfalfa meal, No. 1 fine, Kansas City	"	23.25	21.30	30.70	32.20	32.20
Indexes of Livestock-Feed Price Ratios 2/						
Hog-corn ratio, Chicago, 1920-39 = 100		68	89	118	123	128
Beef-corn ratio, Chicago, 1920-39 = 100		117	120	113	125	112
Butterfat-feed ratio, United States, 1920-39 = 100		88	101	81	81	3/ 81
Egg-feed ratio, United States, 1931-40 = 100		92	103	108	108	3/114

1/ Grain prices, average for week ended March 14, byproduct feed prices as of March 17.

2/ Index numbers above 100 indicate that ratios are favorable to livestock producers. See table 1, FdS-31.

3/ Estimated.

THE FEED SITUATION

Summary

The total supply of feed grains probably will be a little smaller in 1942-43 than in 1941-42. The indicated acreage to be planted to the four principal feed grains, according to March 1 reports of farmers, is up 6 percent over the 1941 planted acreage, but yields per acre were near record last year. Assuming a yield about equal to the average for the past 5 years on the prospective acreages in 1942, production of feed grains would be slightly smaller than in 1941. A smaller carry-over also is in prospect. Total supplies in 1942-43 may be about 3 percent less than the near-record 1941-42 supply.

Increasing production of livestock and livestock products is in prospect for the next year or so, and the disappearance of feed grains in 1942-43 probably will exceed 1942 production. This would result in some decrease during 1942-43 in the large carry-over of perhaps 600 million bushels of corn now indicated for next October 1.

Supplies of high-protein feeds next season, including the four principal oilseed cakes and meals, copra cake and meal, and gluten feed, are expected to total about 15 percent larger in 1942-43 than in 1941-42, provided the 1942 growing season is favorable and farmers carry out their planting intentions as of March 1. The supply of high-protein feed per animal probably will be the largest on record.

With a strong demand for feed in prospect for 1942-43 and with somewhat smaller supplies of feed grains, feed-grain prices are likely to average higher than in the current season. And the average of all high-protein feed prices in 1942-43 may not be much, if any, lower than in 1941-42, since increased demand will tend to offset the effect of larger supplies.

-- March 28, 1942

REVIEW OF RECENT DEVELOPMENTS

BACKGROUND.- Supplies of feed grains and byproduct feeds have been increasing each year since 1936. For 1941-42 the supply of feed grains was the largest in over 20 years and high-protein feed supplies the largest on record. Disappearance of corn was smaller than production during the years 1937-40, and the carry-over, including Government-owned corn, increased to the largest on record. Disappearance of feed grains has increased considerably during the past year because of the sharp increase in livestock numbers and production. Prices of feed grains and byproduct feeds advanced sharply during 1941, largely because of the increased demand from producers of livestock and livestock products. Feed prices are now at the highest level in over 12 years except the drought years.

Acreage Goals for Feed Crops and Intentions of Farmers

In order to have ample feed for larger livestock requirements in 1942-43 without greatly reducing feed-grain stocks, the 1942 acreage goal for corn was increased in January to 92.5-95 million acres and the corn acreage allotment in the commercial area was increased 10 percent above the 1941 allotments. Larger acreages of oats and barley were also encouraged for some areas. The acreage goal for soybeans was increased to 9 million acres, flaxseed to 4.5 million acres; and peanuts for oil to 3.4 million acres. Increased production of oil crops would make available to domestic feeders much larger supplies of oilcake and oilmeal in 1942-43.

Farmers indicated on March 1 that they intend to plant 91.3 million acres of corn. The intentions of farmers were to increase the combined oats and barley acreage 4 million acres or 8 percent over the total area seeded to these grains in 1941. The acreage intended to be planted to soybeans grown alone, including soybeans for hay, is 14.1 million acres, 4 million acres greater than last year. The intended flaxseed acreage is 4.0 million acres and peanuts grown alone for all purposes 4.2 million acres, of which about 2 million acres would be for oil.

Feed Prices Generally Lower

The price of No. 3 Yellow corn at Chicago declined slightly during the past month after reaching the highest level since 1930, except during the drought years 1934 and 1936. Oats and barley prices have weakened somewhat during the past 2 months. Under the wheat-for-feed program, wheat has been selling somewhat lower per 100 pounds than oats and barley. Prices of brewers' and distillers' grains declined $3 to $5 per ton, during the past month, largely because of the marked increase in supplies of these feeds. Wheat millfeed prices, on the other hand, have risen over $3 per ton since late February and they are now above the peak reached in January. These feeds are unusually high relative to corn, barley, and corn-hominy feed.

Feeding Ratios Generally Favorable for Hog Producers, Unfavorable for Dairymen

Hog prices have advanced more than corn prices during the past several weeks and the hog-corn price ratio (Chicago basis) advanced to 16.6 for the week ended March 14, the highest since October 1938. The 1920-39 March average ratio was 13.0. The ratio of corn to beef cattle prices is also more favorable than average for cattle feeders, but not so favorable as last year. The seasonally adjusted ratio of the price of butterfat to feed was estimated to be about the same in mid-March as in mid-February, when the ratio based on United States prices was about 19 below the average for March 1920-39. (See table 1.) The price of eggs in March was estimated to be somewhat higher relative to feed than the average for March 1931-40, but feed prices were higher than average relative to prices of chickens and turkeys.

Quantity of Corn Sold by the Government and Redeemed by Farmers

The quantity of corn sold by the Commodity Credit Corporation has been reduced considerably since the heavy sales made during January. Smaller sales are largely the result of action taken by the Commodity Credit Corporation to restrict sales of corn to purchasers other than those needing corn for immediate consumption. On March 14, about 79 million bushels remained in Government ownership. On that date 167 million bushels of old corn remained sealed on farms and 95 million bushels of 1941 corn had been sealed.

Stocks of privately owned corn in terminal elevators are now about the largest since 1934. At the beginning of the present marketing year (October 1) commercial stocks of corn totaled 39 million bushels, of which 16 million were privately owned. Since October 1, privately owned stocks have been increasing, while Government stocks have not changed greatly. Of the total of 63 million bushels of commercial stocks in mid-March, about 43 million bushels were privately owned.

Table 2.- Corn: Quantities sold by the Commodity Credit Corporation and redeemed by farmers, monthly, 1941-42

Month	Sold by the Commodity Credit Corporation	Redeemed by farmers	
		1938 and 1939 corn	1940 corn
	1,000 bushels	1,000 bushels	1,000 bushels
October	6,613	14,008	8,079
November	3,868	3,330	2,822
December	9,689	2,764	2,495
January	49,049	4,640	2,872
February	7,479	4,487	2,192
March 1-14	3,891	3,377	778

Byproduct Feed Supplies

United States production of wheat millfeeds is estimated to have been about 11 percent larger in January and February this year than last, but imports of these feeds from Canada were much smaller than a year earlier and total supplies are estimated to be slightly smaller. With a strong demand for all purchased feeds, these feeds are much higher priced at this time than last year. Production of brewers' and distillers' grain also has increased sharply in recent months, and larger supplies of these feeds have been reflected in declining prices. Production of cottonseed cake and meal in February was 12 percent smaller than in February 1941, but utilization was also small and stocks increased slightly.

Ceilings on Animal Byproduct Feed Revised

Revised price ceilings for tankage and meat scraps have been announced by the Office of Price Administration to become effective March 26. The ceiling on these feeds is the highest price between January 20 and March 20 less $5 per ton for meat scraps and minus $6 per ton for digester tankage. Minor changes were made in the price ceiling on fish meal to allow for differences in percentage protein, and fish scrap was included at $3 per ton under the maximum price for fish meal.

OUTLOOK

Acreage, Production, and Supplies of Feed Grains

The acreage planted to four feed grains in 1942 will total about 160 million acres, if farmers carry out their intentions on March 1. This would be about 8.5 million acres larger than the area planted last year and the largest total since 1936. The intended corn acreage is up 4 million acres, oats 1 million acres, barley 3 million acres, and grain sorghums 200,000 acres from the acreage planted in 1941.

If yields per acre this year are about the same as the 1937-41 average, and the acreage planted is about as indicated, production of the four feed grains would total about 104 million tons, 2 percent less than 1941 production, but otherwise the largest production since 1932. Allowing for smaller carry-overs of corn and oats at the beginning of the 1942-43 season than a year earlier, the total supplies of feed grains may be reduced a little more than 2 percent. If the number of grain-consuming livestock increases about 6 percent during 1942, as now seems likely, the supply of feed grains per grain-consuming animal unit in 1942-43 would be 5 to 10 percent smaller than in the current season.

Corn Acreage and Supplies

With the indicated corn acreage of 91.3 million acres and a yield per acre about the same as the 1937-41 average, the corn crop in 1942 would be about 2,600 million bushels. If the carry-over in 1942-43 is about 600 million bushels or 50 million bushels smaller than last October 1, the total supply of corn would be 3,200 million bushels, which would be about 4 percent less than the 1941-42 supply of 3,318 million bushels.

The requirements of corn for livestock feed and commercial uses in 1942-43 probably will be greater than in the current marketing year and some reduction in the large carry-over of corn during 1942-43 is in prospect.

Increased acreages of corn are in prospect for all Corn Belt States. Greatest increases are indicated for Missouri, Kansas, Nebraska, and Minnesota, where acreage is still much below the pre-drought average. Increases of 2-5 percent are indicated for the eastern Corn Belt States.

Other Feed Grains

The 1942 planted oats acreage will be 3 percent larger than in 1941 and the largest since 1935 if producers carry out their March 1 intentions. Much of the prospective increase in oat acreage is in the Southern and Western States, with only a slight increase indicated for the North Central region. Assuming the growing season will be about the same as the average for the past 5 years, the supply of oats will probably be a little smaller than the 1941-42 supply of 1,400 million bushels.

Large percentage increases in barley acreage are in prospect in practically all regions. The increase in acres planted is expected to be large in California and in the western fringe of the Corn Belt. With 1937-41 average yields, and allowing for a larger than average carry-over this June 1, the 1942-43 supply of barley probably will be about 20 percent larger than the 1941 supply.

March 1 intentions of farmers indicate that the acreage planted to sorghums for grain will be 2 percent larger in 1942 than the 1941 planted acreage. The yield per acre probably will be below the high yield of 1941.

Forage Crops

Farmers indicated on March 1 that they intend to use about 61 million acres of crops for hay in 1942, 2.7 percent more than in 1941. This would be the largest tame hay acreage in recent years. Allowing for some increase in hay-consuming animal units during 1942, the 1942-43 supply of hay per animal unit, with an average growing season, would probably be a little smalle than for any of the past 4 years, but somewhat greater than the pre-drought average.

Feed Grain Prices

Prices of feed grains may average higher in 1942-43 than for the 1941-42 season. Conditions indicating higher prices are: (1) Stronger demand from livestock feeders, (2) prospective smaller supplies per animal, (3) a probable increase in the loan rate on 1942 corn as a result of a somewhat higher parity price for corn at the beginning of the 1942 marketing season than at the beginning of the current season. Much will depend, however, on the size of 1942 feed crops and how much prices of livestock products and other products affecting feed grain prices advance. The Government wheat-feed program and other Government programs will probably be important factors influencing prices of all feeds during the next year.

Protein Supplies vs. Livestock Requirements

Increased production of soybean cake and meal in recent years and the sharp reduction in exports of linseed meal have made available to domestic feeders the largest supply of high-protein feeds on record. The supply of the four leading oilseed cakes and meals (cottonseed, linseed, soybean, and peanut) available for domestic consumption has doubled during the past 10 years. Taking into consideration all feeds, however, including feed grains, the protein content of United States feeding rations is still too low to give the most efficient production of livestock products.

Table 3.- Domestic disappearance of feed, protein content as a percentage of total and as a percentage of protein required to balance livestock rations, 1928-42

Marketing year	Domestic disappearance		Protein required 3/	Protein fed as a percentage of all feed fed	Protein fed as a percentage of protein required
	All feed 1/	Digestible protein 2/			
	1,000 tons	1,000 tons	1,000 tons	Percent	Percent
1928-32	103,667	9,315	12,440	9.0	75
1933	92,278	8,226	11,073	8.9	74
1934	68,172	6,395	8,181	9.4	78
1935	90,739	8,502	10,889	9.4	78
1936	76,179	7,517	9,141	9.9	82
1937	92,906	8,842	11,149	9.5	79
1938	97,621	9,289	11,715	9.5	79
1939	99,850	9,473	11,982	9.5	79
1940	105,972	10,197	12,717	9.6	80
1941 4/	114,390	11,004	13,727	9.6	80
1942 5/	118,997	11,629	14,280	9.8	81

1/ Domestic disappearance of: Corn, oats, barley, cottonseed cake and meal, peanut cake and meal; production plus net imports of: Wheat millfeeds, fish meal, soybeans, linseed and copra cakes and meals; production of: Gluten feed, brewers' grains, distillers' grains, beet pulp; estimated production of: Tankage and meat scraps; estimated total quantity wheat fed to livestock and rye fed to livestock on the farms of growers. Excludes corn and barley used for purposes other than feed and cottonseed meal used for fertilizer on cotton farms.

2/ Computed on the basis of the quantity fed and average percent protein in each feed.

3/ Estimated quantity required to give balanced rations for all classes of livestock.

4/ Preliminary estimate.

5/ Expected.

It is estimated that all feed concentrates fed in the United States should average about 12 percent protein to give balanced rations to all livestock 1/. The average protein content of all feeds fed during 1941-42 is expected to be about 9.6 percent or about the same as in 1940-41. With a larger production of oilseeds in prospect for 1942, it is expected to be about 9.8 percent next year (see table 3) compared with 9.0 for the 1928-32 average.

The increase in the protein content of roughages since 1930 because of the larger acreage of alfalfa hay is not allowed for in table 2. This has probably resulted in a little more improvement in rations than these figures indicate. These figures do not include the quantity of skim milk fed. This probably increased from 1928-40, but due to increased requirements for human consumption in the form of dry skim milk, the quantity fed was probably smaller in 1941 and will be smaller this year than in other recent years.

Combined Supplies of Principal High-Protein Feeds Increase Over 80 Percent in 10 Years

The combined supply of principal high-protein feeds available to domestic feeders in 1941-42 is expected to total about 5,700,000 tons, the largest supply on record, and 85 percent greater than in the period 1928-32. This includes carry-in of cottonseed and peanut cakes and meals, expected production plus net imports of cottonseed, soybean, linseed, peanut, and copra cakes and meals plus production of gluten feed, minus cottonseed cake and meal used for fertilizer on cotton farms. Supplies of these feeds in relation to livestock numbers during the past few years, and expected supplies this year and next, are shown in table 4. These feeds vary considerably in protein content. Although they are all used as protein supplements, gluten feed is not always considered as such, since it contains somewhat less protein than other high-protein feeds used in the Midwest and East. Cottonseed, soybean, and linseed cakes and meals contain on an average about 35 to 38 percent digestible protein, linseed meal about 31 percent, gluten feed 23 percent and copra cake and meal about 19 percent. Tankage, meat scraps, and fish meal, also important high protein feeds, are discussed in a later section of this report.

The number of grain-consuming animal units on farms has increased sharply during the past 4 years. On January 1, 1942, the number of grain-consuming animal units on farms, excluding horses and mules, was 8-1/2 percent larger than on January 1, 1941, when numbers were about the same as the 1929-33 average. Supplies of high-protein feeds available per animal unit are estimated to be slightly smaller in 1941-42 than they were in 1940-41, but 70 percent above the pre-drought average.

Supplies of high-protein feed, including gluten feed, available for domestic consumption in 1942-43, with a normal season, are expected to total 6,200,000 tons to 6,800,000 tons, or about 15 percent more than in 1941-42. The top of this range will be reached if all acreage goals are reached and yields are about average. Supplies will be near the lower figure in this range, if the soybean acreage is about a million acres less than the goal of 9 million acres, the acreage of peanuts for crushing is about a million and one half acres below the goal of 3,391,000 acres, and the total supply of

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1/ Based on rations recommended in Feeds and Feeding, by F. B. Morrison.

domestic and imported flaxseed is 45 million bushels instead of the goal of 50 million bushels. March 1 intentions of farmers indicate that the soybean goal probably will be reached, but the peanut acreage may be about 1-1/2 million acres below the goal and the flaxseed acreage 500,000 acres below the goal. In that event, with average yields, supplies of these feeds would be about 6,500,000 tons or about at the mean of the range indicated above. The number of grain-consuming animal units on farms, excluding horses and mules, is expected to increase to about 135 million by January 1, 1943, about 6 percent over 1942. In this event, the supply of high-protein feeds per animal unit in 1942-43 would be about 5 percent larger than the record supply per animal unit in 1940-41, and about 7 percent larger than the supply per animal unit in 1941-42. If all oil-crop production goals are attained, the supply per animal may be about 10 percent larger than in 1940-41 and about 12 percent larger than in 1941-42.

Table 4.- Supplies of specified high-protein feeds available for domestic consumption in relation to livestock numbers, 1928-42

Year beginning Oct. 1/	Cottonseed cake and meal 2/	Soybean cake and meal 3/	Linseed cake and meal 3/	Peanut cake and meal 2/	Copra cake and meal 3/	Gluten feed 4/	Total	Animal units 5/	Supply per animal unit
	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	Millions	Pounds
Average:									
1928-32	1,932	114	310	20	102	598	3,076	117	52.6
1933	1,804	99	142	11	122	580	2,758	124	44.5
1934	1,702	287	202	49	116	456	2,812	101	55.7
1935	1,790	620	264	50	134	624	3,482	105	66.3
1936	2,037	548	273	69	141	551	3,619	104	69.6
1937	2,582	733	177	52	123	591	4,258	104	81.9
1938	2,134	1,054	203	78	152	623	4,224	110	76.8
1939	1,949	1,292	393	43	185	685	4,547	122	74.5
1940	1,975	1,519	742	146	180	831	5,393	117	92.2
1941 6/	1,840	1,950	875	60	55	950	5,730	127	90.2
1942 7/	1,900	2,325- 2,600	800- 875	300- 500	---	950	6,500	135	96.3

1/ Years beginning October, except for cottonseed which begins August 1.
2/ Stocks beginning of year plus production and net imports. Excludes cottonseed cake and meal used for fertilizer.
3/ Production plus net imports (or minus net exports).
4/ Production.
5/ Grain-consuming animal units, excluding horses and mules.
6/ Preliminary estimate.
7/ Expected.

Surplus of Linseed Meal in the East; Deficit of High-Protein Concentrates on the Pacific Coast

The increases in the quantities of soybean and linseed cake and meal available for domestic consumption have tended to shift the surplus and deficit high-protein feed areas. Just prior to 1939, considerable quantities of soybean meal, cottonseed meal, and some linseed meal were shipped North and East from the surplus producing areas of the South and Midwest. Since 1939, the European market has been cut off by the war, and practically all linseed meal produced from Argentine flaxseed by eastern crushers is available to livestock feeders in Eastern States. The surplus of linseed meal is now in the East and there is some movement of this feed from the Atlantic seaboard westward. In recent months linseed meal has been selling $8.00 to $10.00 less in New York and Philadelphia than in midwestern markets, whereas in the years just prior to 1939 prices were a little lower in the Midwest and prior to 1932 they were considerably lower.

The increase in soybean production in recent years has resulted in a surplus of this feed in some of the Corn Belt States and has tended to divert the movement of cottonseed cake and meal to other areas. In 1942-43, the supplies of high-protein feeds will be ample in the East and Midwest if 1942 goals are reached, but on the Pacific coast supplies of these feeds will probably be the smallest in recent years. In this event a greater than average movement of these feeds, or of soybeans for crushing, from the Midwest to the West coast may be necessary. With a favorable season, however, this could be partly offset by the increased feeding of alfalfa hay and other high-protein roughages, which are an important source of protein in this area.

Foreign Trade in High-Protein Feeds

United States is both an importer and an exporter of high protein feeds. In the 10 years prior to the outbreak of war in Europe, annual imports (year beginning October) ranged from 35,000 tons to 181,000 tons and exports ranged from 208,000 tons to 388,000 tons. During the marketing year 1940-41 United States exports of high-protein feeds, most of which were soybean cake and meal, totaled only 31,000 tons, the smallest in more than 20 years. In the years just prior to 1939 most of the exports of these feeds consisted of linseed cake and meal produced from imported flaxseed. In years just prior to 1930, exports of cottonseed cake and meal were also large, amounting to about 15 percent of domestic production, but since 1932-33 such exports have been comparatively small.

Imports of high-protein feeds in 1940-41 totaled about 152,500 tons, 84,000 tons of which were copra cake and meal and 52,000 tons cottonseed cake and meal, along with small quantities of peanut, soybean, and linseed cakes and meals. Net imports of high-protein feeds totaled 121,000 tons during 1940-41. Foreign trade in these feeds is expected to be small during the remainder of the 1941 marketing year and in 1942-43.

Supplies of Tankage, Meat Scraps, and Fish Meal

The production of tankage in 1939, reported by the Bureau of the Census, was 231,871 tons. Meat and bone scrap production totaled 159,138 tons. Comparable figures for 1937 are shown in table 5, but data were not reported prior to that year. The bulk of the tankage produced for livestock feed is 60 percent digester tankage, which contains an average of 56.4 digestible protein. Meat and bone scrap average about 46 to 51 percent digestible protein, and fish meal about 47.5 percent. 1/ Statistics on production of these feeds in 1941 are not yet available. The number of hogs and cattle slaughtered in wholesale establishments gives a rough indication of the production of tankage and meat scraps in meat packing plants for other years since 1928, and prospective production in 1942 and 1943. Tankage and meat scrap production probably will increase considerably during the next 2 years, but present indications are that during 1942 it will lag behind the increasing demand from hog and poultry producers.

The production of fish meal, reported by the Division of Fishery Industries of the Fish and Wildlife Service, was 176,141 tons in 1940. Statistics on total production in 1941 are not yet available, but such statistics as are available indicate that the 1941 production may have been about 200,000 tons. Production in 1942 and 1943 may be considerably smaller than during the past 2 years as a result of curtailment of fishing and increased labor costs. Imports of fish meal totaled 39,000 tons in 1940 and 25,000 tons in the first 9 months of 1941. These may be negligible during the next 2 years. Present indications are that the production of tankage, meat scraps, and fish meal combined, plus imports of fish meal, will be a little smaller in 1942 than in either of the past 2 years and considerably smaller per animal unit. Prospective supplies of these high-protein feeds for 1942, with comparisons, are shown in the following table.

Table 5.- Indicated production of tankage and meat scraps, and production and net imports of fish meal in relation to livestock, 1929-42

Calendar year	Tankage 1/	Meat and bone scraps 1/	Total 1/	Fish meal		Total	Animal units of: hogs and chickens Jan. 1	Feed per animal unit
				Production	Imports			
	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	Millions	Pounds
1929-33			399	104	2/ 33	536	70.9	15.1
1933			414	120	31	565	74.1	15.3
1934			454	174	41	669	70.5	19.0
1935			310	182	32	524	51.5	20.3
1936			384	220	50	654	55.5	23.6
1937	240	127	367	188	77	632	56.6	22.3
1938			374	184	38	596	56.3	21.2
1939	232	159	391	210	56	657	62.3	21.1
1940			465	176	44	685	72.9	18.8
1941 3/						685	66.2	20.7
1942 4/						650	74.0	17.6

1/ Production during the calendar years 1937 and 1939 as reported by Bureau of Census, production in other years indicated by number of hogs and cattle slaughtered in wholesale establishments.
2/ 1931-33 average.
3/ Preliminary estimate.
4/ Expected.

1/ Morrison. Feeds and Feeding.

Outlook for Prices

Prices of soybean meal and peanut meal may be relatively lower than prices of other high-protein feeds in 1942-43 if supplies of these feeds are as large as is now expected. While larger supplies of soybean meal and peanut meal will tend to depress the prices of all high-protein feeds in 1942-43, smaller supplies of feed grains per grain-consuming animal and the strong demand for feed will be important price-supporting factors. Soybean meal has increased in popularity in recent years. Soybean meal, and to some extent other high-protein feeds, compete with feed grains as well as with other byproduct feeds. Despite an increase in soybean meal supplies relative to corn supplies during the past year, soybean meal prices are now at about the highest level relative to corn prices in over 2 years. Furthermore, a larger income from livestock products makes possible a greater cash outlay for purchased feed. Feed grains for the most part are produced by feeders while oilseed cakes and meals are purchased. With a continuation of the present high level of livestock prices in 1942-43, Corn Belt farmers probably will find it profitable to feed the larger supplies of soybean meal to hogs and other classes of livestock at prices near current levels.

Linseed meal prices have increased much less than prices of other high-protein feeds during the past 2 years. The price of linseed meal at eastern markets is unusually low relative to all high-protein feeds in the Midwest. This situation will continue as long as imports of flaxseed on the Atlantic seaboard continue large and European markets are cut off. The disparity between linseed meal prices in the East and prices of all high-protein feeds in the Midwest may be less pronounced in 1942-43, however, if imports of flaxseed are reduced and the quantity of soybeans and flaxseed crushed in the Midwest are as large as now appears probable.

Table 6.- Prices per ton of high-protein feeds, annual 1937-41, quarterly 1941, and January-March 1942

Year and month	Cotton-seed meal	Linseed meal		Soybean meal	Peanut meal	Copra meal	Tankage	Meat scraps	Fish meal
	Memphis	Minn-eapolis	Buffalo	Chicago	southern points	Los Angeles	Chicago	Chicago	San Francisco
	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars
937	30.40	38.00	37.90	37.95	34.89	32.25	53.30	1/46.85	44.25
938	21.90	40.40	41.45	26.70	23.85	27.50	46.20	44.00	43.45
939	24.00	35.75	37.85	27.70	24.65	25.95	54.65	53.85	45.20
940	28.00	28.25	29.40	28.05	26.85	20.90	46.10	44.75	50.10
941	30.80	32.10	29.95	33.30	29.15	33.75	59.50	56.55	66.30
941									
Jan.	27.85	29.50	28.10	29.75	21.94	22.40	48.10	44.40	51.25
Apr.	25.20	28.50	27.50	27.50	24.20	30.80	53.00	50.00	70.40
July	31.00	32.00	28.70	33.80	30.60	36.20	62.00	59.95	75.20
Oct.	36.00	37.50	33.60	37.95	34.00	38.55	70.60	69.40	66.40
1942									
Jan.	39.90	39.50	38.00	46.45	44.10	48.30	76.90	73.75	75.95
Feb.	37.90	42.50	37.60	46.45	45.69	49.50	80.00	75.00	77.40
Mar. 2/	37.50	42.50	36.50	46.20	45.00	50.00	80.00	75.00	77.50

1/ Six months, July-December only.

2/ March 17.

The price of copra meal at San Francisco increased from $24.40 per ton in February 1941 to $49.50 per ton in February 1942, more than 100 percent. California farmers depend largely on copra cake and meal, which is either imported as such or produced from imported copra, for their high-protein feed supply. Imports come principally from the Philippine Islands. They may be negligible during the next year or so. The price of copra meal is much higher at San Francisco than linseed meal or soybean meal in the Midwest, which is contrary to the usual relation of these prices. The short supplies of copra cake and meal may be expected to hold prices of this feed high relative to prices of high-protein feeds in the Midwest during the coming year.

Prices of tankage, meat scraps, and fish meal have advanced $25.00 to $30.00 per ton during the past year, reflecting the increase in demand for these feeds without accompanying increases in supplies. Continued expansion of livestock production during the coming year along with smaller production of fish meal probably will hold prices of these feeds near the price ceilings recently fixed by the Office of Price Administration.

Price ceilings and other Government control measures will probably be important in influencing prices of high-protein feeds during the coming year. Price ceilings are now in effect on tankage, meat scraps, fish meal, and other animal byproduct feeds. Ceilings have not been placed on prices of other high-protein feeds. Price ceilings are in effect on soybean, cottonseed, and peanut oils, and minimum support prices have been announced for soybeans, flaxseed, and peanuts to be produced in 1942. These last measures also may have some effect on cake and meal prices in 1942-43.

Table 7.- Feed grains: Planted and harvested acreages in the United States, 1929-33 average, and 1937-42 annual
(Data for cover page)

Year	Corn 1/		Oats		Barley		Grain sorghums 1/	
	Planted	Harvested	Planted	Harvested	Planted	Harvested	Planted	Harvested
	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres
1929-33 average	105,754	104,544	40,581	39,296	13,398	12,035	7,485	7,148
1933	108,527	105,963	40,177	36,532	13,394	9,687	7,927	7,307
1934	99,806	92,354	38,091	29,455	11,376	6,553	9,009	6,830
1935	98,372	95,804	40,690	39,831	13,140	12,371	11,232	9,354
1936	100,599	93,020	39,117	33,370	12,121	8,372	9,153	6,878
1937	96,342	93,741	37,295	35,256	11,579	9,968	8,487	7,476
1938	93,689	92,222	36,911	35,661	11,345	10,513	8,495	7,680
1939	91,128	88,430	35,399	32,968	14,605	12,644	9,403	8,078
1940	88,563	86,738	37,002	35,393	15,057	13,496	11,331	10,325
1941	87,164	86,089	39,363	37,972	15,080	14,049	9,397	8,903
1942 2/	91,348		40,377		18,208		3/9,585	

1/ For all purposes.
2/ Prospective plantings as of March 1.
3/ Expected to be 2 percent greater than in 1941.

Table 8.- Production and stocks of specified byproduct feeds, February 1940 and 1941, December 1941-February 1942

Item	Feb.		1941	1942	
	1940	1941	Dec.	Jan.	Feb.
	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons
Production					
Cottonseed cake and meal	196.2	201.8	222.5	206.8	176.8
Peanut cake and meal	2.4	18.8	6.9	4.1	3.0
Gluten feed and meal	58.4	59.6	80.8	1/ 83.5	1/ 80.3
Brewers' dried grains ...	6.7	7.4	9.8	10.5	10.2
Distillers' dried grains	14.7	19.1	25.3	30.0	25.5
Wheat millfeeds	334.0	334.1	388.5	401.0	
Stocks, end of month					
Cottonseed cake and meal	200.3	252.9	380.4	370.6	372.2
Peanut cake and meal	2.5	19.7	10.4	7.2	6.8

1/ Domestic grind only.

Table 9.- Prices received by United States farmers for grains and hay, and index of feed grain prices, February 1940 and 1941, December 1941-February 1942

Item	Unit	Feb.		1941	1942	
		1940	1941	Dec.	Jan.	Feb.
		Dollars	Dollars	Dollars	Dollars	Dollars
Corn	Bushel	.547	.560	.669	.727	.766
Oats	"	.377	.329	.452	.502	.520
Barley	"	.461	.423	.561	.608	.628
Grain sorghums	"	.59	.47	.49	.54	.56
Wheat	"	.841	.678	1.022	1.061	1.049
Rye	"	.557	.412	.578	.652	.660
Soybeans	"	.96	.84	1.47	1.65	1.78
Cottonseed	Ton	26.64	24.61	44.65	43.24	45.04
All hay	"	8.10	7.88	9.43	10.15	10.76
Alfalfa hay	"	9.38	8.79	10.96	11.78	12.59
Index of feed grain prices 1/	1910-14 = 100	87	85	106	115	121

1/ Corn, oats, and barley, weighted on basis of quantities fed to livestock during 1935-39.

Table 10.- Prices of specified feeds per 100 pounds, March, 1931-40 average, 1940, and 1941, January-March 1942, and March 1942 as a percentage of average

Item	Mar.			1942			
	1931-40 average	1940	1941	Jan.	Feb.	Mar. 1/	March 1942 as a percentage of 1931-40 average
	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Pct.
Grains							
Corn, No. 3 Yellow, Chicago	1.06	1.03	1.17	1.46	1.46	1.45	137
Oats, No. 3 White, Chicago	1.06	1.34	1.21	1.81	1.75	1.68	158
Barley, No. 3, Minneapolis	1.29	1.10	1.05	1.59	1.52	1.45	112
Wheat, No. 2, Hard Winter, Kansas City	1.42	1.70	1.42	2.09	2.05	2.04	144
Rye, No. 2, Minneapolis	1.03	1.19	.94	1.43	1.39	1.37	133
Byproduct feeds							
Bran, Standard, Chicago	1.08	1.20	1.10	1.76	1.71	1.91	177
Middlings, Standard, Chicago	1.08	1.18	1.12	1.78	1.73	1.86	172
Gluten feed, 23 percent, Chicago ...	1.06	1.12	1.04	1.51	1.55	1.64	155
Hominy feed, white, Chicago	1.09	1.11	1.22	1.69	1.66	1.55	142
Cottonseed meal, 41 percent, Chicago	1.45	1.81	1.54	2.30	2.18	2.14	148
Soybean meal, 41 percent, Chicago ..	1.45	1.52	1.34	2.32	2.32	2.31	159
Linseed meal, 37 percent, Minneapolis	1.61	1.52	1.37	1.98	2.12	2.12	132
Tankage, digester, 60 percent, Chicago	2.14	2.28	2.39	3.84	4.00	4.00	187

1/ Grains, average for week ended March 14, byproduct feeds as of March 17.